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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,115	11/07/2001	Andreas Buos	085874-0381	4653

22428 7590 06/06/2007  
FOLEY AND LARDNER LLP  
SUITE 500  
3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER
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DABNEY, PHYLESHA LARVINIA

ART UNIT	PAPER NUMBER
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2614

MAIL DATE	DELIVERY MODE
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06/06/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/986,115

Applicant(s)

BUOS ET AL.

Examiner

Phylesha L. Dabney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 1/31/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,4-23 and 26-30 is/are allowed.
- 6) ☒ Claim(s) 31-34,36-43 and 45 is/are rejected.
- 7) ☐ Claim(s) 35 and 44 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/31/07</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This action is in response to the amendment filed on 29 June 2006 in which claims 1, 4-23, and 26-45 are pending. Claims 2-3 and 24-25 were cancelled.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims **31-34, 36-43, and 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson (U.S. Patent No. 1,985,722).

Regarding claims 31-32 and 37, Erickson teaches a loudspeaker exciter assembly comprising: a base plate (33) for attachment to an acoustic radiator (23, 24, 30-31; 35-38); and an exciter (10, 12-14, 17-18; 46-47) attached to said base plate in a repeatedly engageable manner (page 2, col.2 line 7).

Erickson fails to teach any means, such as non-repeatedly engageable, for attaching the base plate to acoustic radiator (specifically Erickson does not teach how item 23; 35 is attached to the base plate).

However, the Admitted Prior Art (office action dated 3/29/06) teaches that it was known to use attachment means such as glues, to secure plates (planar surface) to radiators and minimized distortion from movement. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use any means including non-

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repeatedly engageable adhesive glue to secure the base plate to the radiator of Erickson for the reason stated above.

Regarding claim 33, Erickson teaches the loudspeaker exciter assembly according to claim 31 or claim 32, wherein said exciter is engageable with said base plate via a releasable connection (page 2, col. 2 line 7).

Regarding claim 34, Erickson teaches the loudspeaker exciter assembly according to claim 33, wherein said releasable connection is a threaded connection (page 2, col. 2 line 7).

Regarding claim 36, Erickson teaches the loudspeaker exciter assembly according to claim 33, further comprising a locking device (threaded connection, page 2, col. 2 line 7) for locking said releasable connection.

Regarding claims 38-41, see the rejection of claim 31-32 and 37.

Regarding claims 42-43, see the rejection of claims 33-34.

Regarding claim 45, see the rejection of claim 36.

***Allowable Subject Matter***

Claims 35 and 44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Claims 1-30 are allowed. With respect to these claims, the prior art of record fails to teach a bending wave exciter comprising a coupler attached to a surface of the acoustic radiator; a voice coil assembly attached to the coupler, and a suspension attached to the coupler and magnetic assembly for supporting the magnet assembly adjacent to the voice coil assembly relative to the coupler, as substantially described and connected with the other functional language of these claims.

### ***Response to Arguments***

Applicant's arguments have been fully considered but they are not persuasive.

With respect to the Applicant's argument that *Erickson fails to teach the acoustic radiator is mounted on the surface of a base plate*, the Examiner disagrees.

Erickson clearly teaches an acoustic radiator (diaphragm assembly) being capable of surface mounting via members (23,35) to base plate (33).

Therefore, the rejection is being maintained.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phylesha L. Dabney whose telephone number is 571-272-7494. The examiner can normally be reached on Mondays, Wednesdays, Fridays 8:30-4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 571-272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

**Any response to this action should be mailed to:**  
Commissioner of Patents and Trademarks  
P O Box 1450  
Alexandria, VA 22313-1450

**Or faxed to:**  
(703) 273-8300, for formal communications intended for entry and for informal or draft communications, please label "Proposed" or "Draft" when submitting an informal amendment.

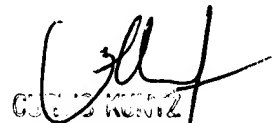
**Hand-delivered responses should be brought to:**  
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Alexandria, VA 22314

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 23, 2007

PLD

  
GAIL M. HENRY  
Patent Examiner  
MAY 23 2007